

CLAIMS**WHAT IS CLAIMED IS:**

1. A refrigeration apparatus provided with a refrigerant circuit (90) having a plurality
5 of refrigerant circulating routes and capable of operation in a mode where the plurality of refrigerant circulating routes differ in at least one of refrigerant evaporation temperature and refrigerant condensation temperature,
wherein a compressor (10) of the refrigerant circuit (90) comprises a single casing (11) in which a first compression mechanism (31) linked to a first refrigerant circulating
10 route and a second compression mechanism (32) linked to a second refrigerant circulating route are arranged.
2. The refrigeration apparatus of claim 1,
wherein the first and second compression mechanisms (31, 32) differ from each
15 other in compression ratio.
3. The refrigeration apparatus of claim 1,
wherein the first and second compression mechanisms (31, 32) differ from each
other in displacement volume.
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4. The refrigeration apparatus of any one of claims 1-3,
wherein:
the first and second compression mechanisms (31, 32) are scroll compression
mechanisms,
25 an orbiting scroll (50) integrated by sequentially layering a first flat-plate part (51),
a first movable-side wrap (53), a second flat-plate part (52) and a second movable-side
wrap (54), and a fixed scroll (40) having a first stationary-side wrap (42) which engages

the first movable-side wrap (53) and a second stationary-side wrap (47) which engages the second movable-side wrap (54) are provided,

the first stationary-side wrap (42) and the first movable-side wrap (53) together form the first compression mechanism (31), and

5 the second stationary-side wrap (47) and the second movable-side wrap (54) together form the second compression mechanism (32).

5. The refrigeration apparatus of any one of claims 1-3,
wherein:

10 the first and second compression mechanisms (31, 32) are scroll compression mechanisms,

an orbiting scroll (50) having a first movable-side wrap (53) formed in standing manner on one surface of a flat-plate part (55) and a second movable-side wrap (54) formed in standing manner on the other surface of the flat-plate part (55), and a fixed scroll
15 (40) having a first stationary-side wrap (42) which engages the first movable-side wrap (53) and a second stationary-side wrap (47) which engages the second movable-side wrap (54) are provided,

the first stationary-side wrap (42) and the first movable-side wrap (53) together form the first compression mechanism (31), and

20 the second stationary-side wrap (47) and the second movable-side wrap (54) together form the second compression mechanism (32).

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